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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,163	05/23/2001	Martin B. Nilsson	S0006-003001	2828
7590	05/03/2006		EXAMINER	
KRISTOFER E. ELBING 187 PELHAM ISLAND ROAD WAYLAND, MA 01778				LE, UYEN T
		ART UNIT	PAPER NUMBER	2163

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/865,163	NILSSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Uyen T. Le	2163	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,  
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 09 March 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 16-36 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>21Mar2006</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### ***Response to Amendment***

1. Applicant's amendment to the specification to update the status of this application is acknowledged. Consequently, objection to the specification is withdrawn.
  
2. Applicant's amendment to claim 17 is acknowledged. Consequently, objection to claim 17 is withdrawn.
  
3. Applicant's arguments regarding Williamson of record have been fully considered but they are not persuasive.

Applicant argues "Williamson says nothing about detection of ranges or assignment of query devices. These types of steps might be manual steps instead of automatic ones, or they could be absent altogether". In response, the examiner disagrees. Claim 1 recites "automatically detecting a data range for each of at least a plurality of the fields in the data records retrieved from the data set". This limitation is met when Williamson shows detecting real estate records including price range (see Figure 1). Furthermore, claim 16 recites "automatically assigning a display query device to each of the plurality of fields". Williamson clearly teaches this automatic step when Williamson shows a plurality of sliders according to query fields in Figure 1.

Applicant cited a program alleged as supporting applicant's interpretation of the Williamson reference. The examiner asserts that the reference alone teaches all the claimed subject matter because even assuming the query device ranges and allocations

are hard-coded for one specific data set as argued by the applicant, it meets all the claimed limitations of automatically detecting a data range of each of a plurality of fields in the data records retrieved and automatically assigning a display query device to each of those fields.

Applicant presents no further arguments regarding dependent claims.

Applicant has not responded to the double patenting rejection of claims 16, 35, 36.

For all the reasons stated above, rejection to claims 16-36 is maintained and hereby repeated.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16, 18, 19, 20, 29, 30, 35, 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Williamson et al, "The Dynamic HomeFinder: Evaluating Dynamic Queries in a Real-Estate Information Exploration System", ACM 1992, pages 338-346.

Regarding claim 16, Williamson discloses a method for visualizing data from a data set (see the entire document). The claimed "retrieving a plurality of data records...plurality of fields" is met by the fact that the method of Williamson retrieves real estate records (see Introduction). The claimed "automatically detecting a data range...from the data set" is met by the fact that the method detects real estate records

including price range (see Figure 1). The claimed “automatically assigning a display query device to each of the plurality of fields” is met by the sliders shown in Figure 1. The claimed “displaying a graphical visualization...from the data set” is met by Figure 2. The claimed “sensing adjustment...query devices” is met when Williamson shows that users use the sliders to choose a value. The claimed “updating the graphical visualization...step of sensing” is met by Figures 3-6.

Claims 18, 19 are met when Williamson discloses multiple sliders (see Figure 1).

Regarding claim 20, Williamson discloses a query device that includes a scale based on a data range detected (see introduction).

Regarding claims 29, 30, Williamson discloses the data set is stored in a database or in a data set file (see page 342, user experiment).

Claims 35, 36 correspond to a system for the method of claim 1, thus are rejected for the same reasons discussed in claim 1 above.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17, 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson et al, “The Dynamic HomeFinder: Evaluating Dynamic Queries in a Real-Estate Information Exploration System”, ACM 1992, pages 338-346, in view of

Hudson et al, "Automatic Generation of Starfield Displays Using Constraints", ACM 1995, pages 202-203.

Regarding claim 17, Williamson discloses automatically assigning at least one graphical query device that responds to at least one graphical primary user input action that corresponds to a value of one of the fields (see Figure 1) but does not specifically show a graphical query device that responds to at least one non-graphical secondary user input action corresponding to a value of one of the fields. However, it is well known in the art as shown by Hudson to use such a graphical query device (see Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art to include the claimed query device while implementing the method of Williamson in order to provide more choice to users to enter query criteria as taught by Hudson.

Regarding claims 21-23, Williamson does not specifically show detecting a data type and assigning one of a plurality of types of query device in response to automatically detecting a data type of field names. However, it is well known in the art to detect a data type and assigning one of a plurality of types of query device as shown by Hudson (see Figure 1). Furthermore, since each data record includes a plurality of fields having field names, it would have been obvious to one of ordinary skill in the art to include the claimed features while implementing the method of Williamson in order to provide the proper query tool to the user for each field based on readily available field names.

Regarding claim 24, Williamson does not specifically show assigning one of a plurality of different types of query device in response to the step of automatically

detecting a data range. However, it is well known in the art to do so as shown by Hudson (see Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art to include such features while implementing the method of Williamson in order to provide a proper query tool to users.

Regarding claim 25, Williamson does not specifically show assigning one of a plurality of different types of query device in response to user input. However, it is well known in the art as shown by Hudson to do so (see Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art to include the claimed features while implementing the method of Williamson in order to accommodate users requirements.

6. Claims 26-28, 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson et al, "The Dynamic HomeFinder: Evaluating Dynamic Queries in a Real-Estate Information Exploration System", ACM 1992, pages 338-346.

Regarding claims 26-28, Williamson discloses displaying a visualization that shows a relationship between fields (see Figures 2-6). Although Williamson does not specifically show which field is assigned dependent or independent, either automatically or by user input, since the method allows dynamic querying, it would have been obvious to one of ordinary skill in the art to include such features depending on users requirements.

Regarding claim 31, although Williamson does not specifically show the assignments made in the step of automatically assigning are user-changeable, since

the method allows dynamic interactive querying, it would have been obvious to one of ordinary skill in the art to include such features in order to allow more flexibility to users.

Regarding claims 32-34, official notice is taken that it is well known in the art to graph using X-Y plot, bar chart or pie chart depending on how information is to be visually presented. Therefore, it would have been obvious to one of ordinary skill in the art to include any visualization tool while implementing the method of Williamson depending on how information is to be presented.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 16, 35, 36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8, 9 of U.S. Patent No. 6,014,661. Although the conflicting claims are not identical, they are not patentably

distinct from each other because claims 16, 35, 36 of the instant application are broader versions of claims 1, 8, 9 of the US patent, thus anticipated by the US patent. Furthermore, it is obvious to remove limitations to broaden a claim.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sang'udi et al (US 6,842,176) teach controlling data visualization in external dimensions.

Schmitt (US 6,463,431) teaches database evaluation system and iterative visual feedback.

Jain et al, "Data Structures for Dynamic Queries: An Analytical and Experimental Evaluation", ACM 1994, pages 1-11.

Hibino et al, "User Interface Evaluation of a Direct Manipulation Temporal Visual Query Language", ACM 1997, pages 99-107.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T. Le whose telephone number is 571-272-4021. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

24 April 2006



UYEN LE  
PRIMARY EXAMINER